

are mostly taken from various older publications. The present work is a competent attempt to treat completely and independently a geographical area whose moss-flora should by now be fairly well known, but is still greatly in need of revision. In starting with the third volume instead of the first the author is taking that group of genera with which he is most familiar, having published revisions of most of them a number of years ago. He has in the meantime changed his conceptions in some cases. That in his treatment of the *Hypnaceae* he emancipates himself entirely from the recent system of Brotherus-Fleischer in the second edition of Engler-Prantl is a welcome fact, but one is not always persuaded of the correctness of the conclusions reached. For example, the complete separation of *Pseudisotheceium* (new genus) *myosuroides* and *stoloniferum* from *Isotheceium viviparum* or *myurum* seems extremely dubious. The genus *Bryhnia* (maintained both by Grout and Brotherus-Fleischer) has never appealed to me as a natural group. The inclusion in *Bestia* of *Thamnium Holzingeri* and *Isotheceium Brewerianum* and the segregation of *Brachythecium acuminatum* and two other closely related species as a new genus *Chamberlainia* are bold innovations. But whatever attitude of disagreement one may assume on this or that minor point, one is impressed here as always by the independent and essentially accurate scholarship of Grout, together with the paedagogical ability to make his publications clear and interesting, which has contributed so much to keep alive American bryology for a generation. This is a substantial contribution to our knowledge of North American mosses.

ITHACA, N. Y.

A. LEROY ANDREWS

PROCEEDINGS OF THE CLUB

MEETING OF NOVEMBER 14, 1928

The meeting was held at the American Museum of Natural History and was called to order by Vice-President Hazen at 8:30 P.M. The following candidates for membership were un-animously elected:

Mr. Louis Eisman, 45 Rockaway Ave., Brooklyn, N. Y.

Mr. Louis Lindstrom, 530 West 159th St. New York, N. Y.
Miss Clara Raska, 21-14 149th St. Whitestone, N. Y.

Mr William T. Davis presented a brief communication regarding a hybrid oak found by him last June at Westerleigh, Staten Island. This paper is printed in full in this number of *Torreyia*.

Dr. Forman T. McLean addressed the Club on "Gladiolus and its Development from the Wild" showing about 100 beautifully colored slides and some autochrome plates. Dr. McLean spoke of the natural distribution of the wild species of gladiolus and traced the development of the garden forms up to the present time, beginning with the first Gandavensis hybrids of about 1840. His paper is published in full in this number of *TORREYA*.

ARTHUR H. GRAVES
Secretary

MEETING OF DECEMBER 4, 1928

The meeting was held at the American Museum of Natural History, and was called to order by Vice-President Hazen at 8:20 P.M. The following candidates were unanimously elected to membership:

- Miss Fannie Asherowitz, 35 Osborn St., Brooklyn, N. Y.
Mr. Don O. Baird, 509 West 121 St., New York, N. Y.
Miss Rachel Beam, 540 Ocean Ave., Brooklyn, N. Y.
Miss Agnes W. Benedix, 3166 Webster Ave., New York, N. Y.
Mr. William Birrell, 60 East 94th St., New York, N. Y.
Miss Nancy Brenner, 635 West 169th St., New York, N. Y.
Miss Belle H. Burr, Brooklyn Botanic Garden, Brooklyn, New York.
Dr. R. H. Colley, 36 Argyl Place, Rockville Center, New York.
Mr. J. Joseph Copeland, Biology Department, College of N. Y. C., Convent Ave. & 139th St., New York, N. Y.
Miss Dorothy Francis, Biophysics Laboratory, Memorial Hospital, 2 West 106th St., New York, N. Y.
Miss Meriam Glassman, 1265 Walton Ave., Bronx, N. Y.
Mr. Oscar Goldin, 21 East 110th St., New York, N. Y.

- Miss Ethel Greenburg, 749 West End Ave., New York, N. Y.
 Miss Margaret A. Griffin, 45 Clark St., Paterson, N. J.
 Mrs. Cecilia Mann Grossman, 103 East 15th St., New York, N. Y.
 Miss Grace L. Holmes, 2309 Glenwood Road, Brooklyn, N. Y.
 Mr. Arthur C. Lasswell, 500 East Fordham Road, New York, N. Y.
 Miss Mary T. MacMurray, 8629-109th St., Richmond Hill, New York.
 Miss Helen S. Morris, 2691 Creston Ave., New York, N. Y.
 Miss Rosemary F. Mullen, 420 East 84th St., New York, N. Y.
 Mr. William Rogenstein, 938 Longwood Ave., Bronx, New York City.
 Mr. Albert Saeger, Junior College of Kansas City, Kansas City, Missouri.
 Miss Adelaide Taub, 1517 Jesup Ave., Bronx, N. Y.
 Miss Phyllis L. Taylor, 792 East 175th St., New York, N. Y.
 Miss Elizabeth M. Tompkins, 134 Linden Blvd., Brooklyn, N. Y.
 Miss Ruth N. Walker, 96 Winthrop Ave., Brooklyn, N. Y.
 Miss Marie Wallfield, 1269 46th St., Brooklyn, N. Y.
 Miss Coila B. Wright, 8625 Whitney Ave., Elmhurst, Long Island, New York.

The secretary spoke of the arrangements that had been made by the committee composed of the officers of the Club for a smoker given by the Torrey Botanical Club to visiting botanists at the December meeting of the A. A. A. S. in New York City. The smoker to be held at the Hotel Astor at about 10 p. m., immediately following the dinner of the Botanical Society of America. All members of the Club were urged to be present.

The scientific part of the program consisted of a paper by Dr. H. L. Shirley entitled, "The Ecological Importance of Light in the Growth of Forest Plants." His conclusions were as follows:

1. 1 per cent of full sunlight or more is necessary for the survival of the plants studied.

2. 8-15 per cent intensity is necessary for flowering and fruiting.

3. To insure reasonably good growth and the completion of the plant's life cycle the light intensity should be 20 per cent of full summer sunlight.

4. Shading to 50 per cent intensity during the summer may cause no marked decrease in the rate of growth and may be beneficial for some shade-loving plants.

5. In the forest, lack of vegetation under a canopy may be due to lack of soil moisture if it falls below the wilting coefficient, and to lack of light if it gets below 1 per cent intensity.

6. The complete solar spectrum is more efficient for the growth of plants than any portion of it.

7. The plants studied grow more efficiently without the red region of the spectrum, than without the blue region.

8. It seems highly improbable that sufficient change in light quality takes place in passing through a forest canopy to influence plant growth to any appreciable extent.

ARTHUR H. GRAVES
Secretary

NEWS NOTES

During the week of August 13th the Plant Science Seminar held its sixth annual session at the Massachusetts College of Pharmacy, Boston, Mass. The Chairman, Heber W. Youngken, in his address gave as the objects of the Seminar the bringing together of pharmacognosists for social contact and the exchange of ideas and methods, the acquisition of new facts by field trips and laboratory demonstrations, and the stimulation of research in connection with pharmacognosy and plant chemistry. He also referred to the fact that at the seminar herbarium specimens from different localities were to be exchanged.

Dr. John Merle Coulter, the "Dean of American Botanists" died on December 24, 1929. He served in several universities, becoming head of the department of botany at the University